

1. Amendments to the Claims:

A clean version of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR § 1.121(c)(3). This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A three dimensional ultrasound imaging device, comprising:
an interpolator that interpolates three-dimensional volumes derived from ~~three-dimensional~~ ultrasound image data to obtain at least one interpolated three-dimensional volume, providing up sampled three-dimensional volumes; and
a memory that stores at least one of the ~~three-dimensional~~ ultrasound image data and the up sampled three-dimensional volumes.
2. (Currently amended) The ultrasound imaging device of claim 1, further comprising:
a probe that sends ultrasound waves, gathers reflected ultrasound waves and creates the ultrasound image data; and
a processor that converts the ultrasound image data to the three-dimensional ~~ultrasound image data~~ volumes.
3. (Previously presented) The ultrasound imaging device of claim 1, further comprising:
a display that displays the up sampled three-dimensional volumes.
4. (Previously presented) The ultrasound imaging device of claim 1, wherein the interpolation comprises at least one of interpolating 2 three-dimensional volumes to 4 three-dimensional volumes, interpolating 3 three-dimensional volumes to 4 three-dimensional volumes and interpolating 3 three-dimensional volumes to 5 three-dimensional volumes.

5. (Canceled)

6. (Canceled)

7. (Previously presented) The ultrasound imaging device of claim 1, wherein the interpolation comprises at least one of straight line, parabolic, stepped, cubic, FIR (Finite Impulse Response) and IIR (Infinite Impulse Response) interpolation.

8. (Currently amended) A method of processing ~~three-dimensional~~ ultrasound imaging data, comprising:

creating up sampled ultrasound image three-dimensional volumes from a plurality of three-dimensional ultrasound image data volumes using interpolation;

storing at least one of the three-dimensional ~~ultrasound image data~~ volumes and the up sampled ultrasound image three-dimensional volumes; and

rendering the up sampled ultrasound image three-dimensional volumes into display data,

wherein creating the up sampled ultrasound image three-dimensional volumes comprises interpolating ~~a the~~ a plurality of three-dimensional volumes derived from the three-dimensional ultrasound image data to obtain at least one interpolated three-dimensional volume.

9. (Currently amended) The method of processing ~~three-dimensional~~ ultrasound imaging data of claim 8, further comprising:

sending ultrasound waves, gathering reflected ultrasound waves and creating raw ultrasound data; and

converting the raw ultrasound data to the plurality of three-dimensional ultrasound image data volumes.

10. (Currently amended) The method of processing ~~three-dimensional~~ ultrasound imaging data of claim 8, further comprising:

displaying the rendered display data.

11. (Currently amended) The method of processing ~~three-dimensional~~ ultrasound imaging data of claim 8, wherein interpolating the plurality of three-dimensional volumes comprises at least one of [[,]] interpolating 2 three-dimensional volumes to 4 three-dimensional volumes, interpolating 3 three-dimensional volumes to 4 three-dimensional volumes and interpolating 3 three-dimensional volumes to 5 three-dimensional volumes.

12. (Canceled)

13. (Canceled)

14. (Currently amended) The method of processing ~~three-dimensional~~ ultrasound imaging data of claim 8, wherein interpolating the plurality of three-dimensional volumes comprises at least one of straight line, parabolic, stepped, cubic, FIR (Finite Impulse Response) and IIR (Infinite Impulse Response) interpolation.

15. (Previously presented) A system for three-dimensional ultrasound imaging, comprising:

an interpolator that interpolates three-dimensional objects derived from three-dimensional coordinates of ultrasound image data to obtain at least one interpolated three-dimensional object, providing up sampled three-dimensional objects; and

a memory that stores at least one of the three-dimensional ultrasound image data and the up sampled three-dimensional objects.

16. (Previously presented) The system for three-dimensional ultrasound imaging of claim 15, further comprising:

a probe that sends ultrasound waves, gathers reflected ultrasound waves and creates the ultrasound image data; and

a processor that converts the ultrasound image data to the three-dimensional coordinates.

17. (Previously presented) The system for three-dimensional ultrasound imaging of claim 15, further comprising:

a render engine that renders display data from the up sampled three-dimensional objects; and

a display device that displays the rendered display data.

18. (Previously presented) The system for three-dimensional ultrasound imaging of claim 15, wherein the interpolation comprises at least one of interpolating 2 three-dimensional objects to 4 three-dimensional objects, interpolating 3 three-dimensional objects to 4 three-dimensional objects and interpolating 3 three-dimensional objects to 5 three-dimensional objects.

19. (Canceled)

20. (Previously presented) The system for three-dimensional ultrasound imaging of claim 15, wherein the interpolation comprises at least one of straight line, parabolic, stepped, cubic, FIR (Finite Impulse Response) and IIR (Infinite Impulse Response) interpolation.

21. (Previously presented) The ultrasound imaging device of claim 1, wherein the interpolation comprises interpolating 2 three-dimensional volumes to 3 three-dimensional volumes.

22. (Currently amended) The method of processing ~~three-dimensional~~ ultrasound imaging data of claim 8, wherein interpolating the plurality of three-dimensional volumes comprises interpolating 2 three-dimensional volumes to 3 three-dimensional volumes.

23. (Previously presented) The system for three-dimensional ultrasound imaging of claim 15, wherein the interpolation comprises interpolating 2 three-dimensional objects to 3 three-dimensional objects.